

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

In the Matter of the Petition of the)
DEPARTMENT OF PARKS AND RECREATION)
for Review of Cease and Desist)
Order No. 82-08, Order No. 82-07,)
NPDES Permit No. CA 0048267, Central)
Coast Regional Water Quality Control)
Board. Our File No. A-309.)

ORDER NO. WQ 82-15

BY THE BOARD:

On February 19, 1982, the California Regional Water Quality Control Board, Central Coast Region (Regional Board), adopted Cease and Desist Order No. 82-08 and reclamation requirements in Order No. 82-07 (NPDES No. CA 0048267) for the California Department of Parks and Recreation (petitioner or Department), Big Basin State Park.

On March 23, 1982, the Office of the Chief Counsel received a timely petition from the Department.

I. BACKGROUND

Big Basin Redwoods State Park is situated in the Santa Cruz Mountains, Santa Cruz County. The treatment facility at Big Basin was constructed in 1938. It serves campgrounds and park residences and consists of secondary treatment with a capacity of 150,000 gallons per day (gpd). The facility discharges 37,000 gpd of treated wastewater to the East Branch of Waddell Creek. Wastewater comprises approximately 50 to 70 percent of the stream flow during low-flow conditions, which also corresponds to the time of highest recreation use.

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A review of the regulatory history of this facility reveals a continuing and frustrating effort by the Regional Board to either eliminate or upgrade this discharge to the creek. Delays have been numerous and progress slow.

The treatment facility has operated pursuant to waste discharge requirements since 1968. An NPDES permit authorizing discharge to the creek was adopted by the Regional Board in 1974 and reissued in 1979. The Regional Board had traditionally been strongly in favor of a land discharge and had viewed the 1968 waste discharge requirements and the NPDES permits as an interim measure while progress was made towards a land disposal system. The 1979 NPDES permit prohibited a discharge to Waddell Creek effective June 30, 1981. This approach is consistent with both the interim Basin Plan, adopted in 1971 and the Basin Plan adopted in 1975 which prohibits discharges to coastal streams which flow directly to the ocean. An exception exists where benefits can be realized from direct discharge of reclaimed water.

Due to the Department's failure to make satisfactory progress to eliminate the discharge, the Regional Board adopted Cease and Desist Order No. 80-01 in January 1980, imposing a time schedule for compliance upon the Department. In July 1980 the Department submitted an engineering study which concluded continued discharge to Waddell Creek to be the only feasible disposal alternative. The Regional Board agreed and accordingly modified the cease and desist order to recognize a continued

discharge to the creek. The time schedule for completing treatment facility improvements were modified, requiring improvements to be complete by December 1, 1982.

In February 1982 the Regional Board adopted the subjects of the current petition: Order No. 82-07, an NPDES permit; and Order No. 82-08, a cease and desist order. The NPDES permit continued the existing effluent standards for discharge to the creek, established new effluent standards for the completed treatment facility improvements, established receiving water limits and incorporated the compliance time schedule from the existing cease and desist order. It extends the existing permit until July 1, 1984. The time schedule in the cease and desist order was accordingly modified. The Department is required to meet the revised, more stringent, effluent standards by December 1, 1982. The improvements were deemed necessary for the discharge to qualify for the reclamation exception to the Basin Plan's prohibition against discharges to coastal streams.

The project to upgrade the existing treatment facilities has been considered for grant funding since the early 1970s. The Department has continually been unable to meet grant deadlines, or include the necessary improvements in its budget. The Regional Board indicates that the project has always been in a fundable category, but that the Department has not capitalized on the opportunity. Because of failures to timely comply with grant regulations, the costs of Step 1 and Step 2 have been born by the Department.

II. CONTENTIONS AND FINDINGS

The Regional Board believes that the present discharge from the Big Basin Treatment Plant is not of sufficient quality to qualify for an exception from the discharge prohibition allowed for approved reclamation programs. The upgraded quality of the effluent called for in the revised waste discharge requirements would qualify the discharge as a reclamation project for stream flow augmentation and thereby qualify as an exception to the Basin Plan's prohibition.

The Department urges that the more stringent effluent limitations and reclamation requirements for the treatment plant established in the current order are unreasonable. Specifically, the petition challenges three of the discharge specifications, relating to limitations set for total nonfilterable residues, biochemical oxygen demand (BOD) and the requirement that reclaimed water discharged to Waddell Creek be adequately coagulated. The petition also challenges the requirement that a specific test method be used to measure residual chlorine. Before reviewing each aspect of the requirements contested by the Department, we will discuss the basic issues raised concerning the appropriate level of treatment.

The Department generally urges that more stringent requirements are both too costly and are not needed for the treatment plant. The petition notes that the treatment facility has been in place since 1938 without causing any appreciable

change in the stream quality. The Department states that it will cost approximately \$175,000 to upgrade the treatment plant to meet the revised requirements.

We have previously addressed the issue of the availability of grant funding and the duty to meet required water quality standards. In a policy adopted October 29, 1980,^{1/} the State Board set forth guidance on the appropriate enforcement actions for NPDES municipal^{2/} dischargers. The policy makes it clear that NPDES dischargers must provide required treatment regardless of availability of grant funds. The policy further provides that enforcement actions are appropriate when delay in construction will result in public health or significant water quality problems, regardless of availability of grant funding.

This approach is consistent with the recent amendment to the Clean Water Act, providing authority to EPA to provide case-by-case extensions to 1988 for communities for compliance with the secondary treatment requirement. As noted in the Congressional Record, as part of the legislative history for this amendment:

"Nothing in this provision is intended to suggest that a community's obligation to comply with the law is contingent upon the availability of Federal grant assistance.

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1. State Water Resources Control Board Municipal Grants and Enforcement Position Statement on NPDES Dischargers, approved by motion at October 16, 1980, Board Meeting.
 2. Section 502(4) of the Clean Water Act includes the Department as a "public body created by or pursuant to State law" as a municipality.

"...there is no direct correlation in the law between the availability of funds and the obligation of a community to comply with its requirements." 3/

The Department generally opposes being required to spend an estimated \$175,000 to achieve what it terms a "minimal, if any" improvement in water quality. The petitioner argues that this is economically unreasonable and has not been shown to be necessary. The Department cites the EPA Facility Plan Review Manual which states:

"Current EPA policy requires a rigorous review of projects designed for treatment more stringent than secondary. The incremental, additional capital costs of a project, which are attributable to effluent limitations or water quality more stringent than secondary, must be based on a justification showing significant receiving water quality improvement and mitigation of public health problems where they exist. Furthermore, projects requiring treatments more stringent than secondary should be evaluated for their financial impact on the community." 4/

For reasons discussed below, we feel that the more stringent requirements are necessary.

Contention No. 1

Reclamation specifications calling for a higher level of treatment and for coagulation as of December 1, 1982, should be deleted. The petitioner urges that the specifications currently in effect for total non-filterable residue and BOD are sufficient to safeguard the existing and anticipated beneficial uses of Waddell Creek.

3. Congressional Record -- House, December 16, 1981, p. H. 9826.

4. p. IV-23

Finding: Beneficial uses of Waddell Creek include agricultural water supply, groundwater recharge, contact and non-contact water recreation, wildlife habitat, cold freshwater habitat, fish migration, and fish spawning. The Basin Plan also designates municipal and domestic water supply and industrial water supply as beneficial uses of Waddell Creek. The petitioner notes that the Regional Board found that domestic and industrial water uses do not exist and are not anticipated.^{5/} The petitioner therefore believes that the Regional Board is imposing unreasonably high standards for the quality of the treated effluent. We do not agree.

The State Department of Health Services has developed regulations specifying the chain of treatment required for reclaimed water used as a source of supply in a nonrestricted recreational impoundment. Specifically, Section 60315 of the regulations provides as follows:

"Reclaimed water used as a source of supply in a nonrestricted recreational impoundment shall be at all times an adequately disinfected, oxidized, coagulated, clarified, filtered wastewater. The wastewater shall be considered adequately disinfected if at some location in the treatment process the median number of coliform organisms does not exceed 2.2 per 100 milliliters and the number of coliform organisms does not exceed 23 per 100 milliliters in more than one sample within any 30-day period. The median value shall be determined from the bacteriological results of the last 7 days for which analyses have been completed."

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5. The Regional Board response to the petition concedes that such uses do not exist downstream. However, the Regional Board indicates that it is only because such uses are absent that it is permitting the discharge to the creek to take place at all.

Although there is no impoundment, the Regional Board and the Santa Cruz County Health Department consider this reach of Waddell Creek to have a non-restricted recreational beneficial use. The Department of Health Services has also promulgated "Uniform Guidelines for Sewage Disinfection" for situations not covered by reclamation criteria. The Guidelines specify, in part:

"Case II. Proposed Discharge is to:

Accessible drainage ways or ephemeral streams with little or no natural flow during all or part of the year.

Accessible drainage ways and ephemeral streams which received waste discharges are often attractive areas for planned or unplanned recreational activities involving water contact. Further, there is generally little dilution available during the summer recreational season. The recommended disinfection criteria are logically related to the degree of public exposure.

* * *

c. A case II discharge occurs where the RWQCB has identified water contact recreation as a beneficial use and most, if not all, of the following conditions are met:

1. The discharge occurs in a residential area.
2. The discharge occurs in an area where there is ready access to the stream and exclusion of the public is not a realistic alternative.
3. Historical attempts to post the stream to warn and exclude the public have been unsuccessful.
4. The recreation potential in the stream is high and justified because of weather, proximity to other recreation areas, etc.
5. Public interest has been identified and the resident population wants or expects body contact recreation in the stream.

Recommendation: The effluent must be adequately disinfected, oxidized, coagulated and filtered wastewater. The wastewater shall be considered to be adequately disinfected if at some point in the treatment process the median MPN of the total coliform organisms does not exceed 2.2/100 ml." (Emphasis added.)

These criteria are equivalent to those contained in Section 60315.

These criteria are reflected in Regional Board Order No. 82-07.

Because of the high probability of body contact recreation in a creek running through a state park, as identified in the Basin Plan, we agree that the treatment criteria specified in the Guidelines is appropriately included in the waste discharge requirements.^{6/} In this connection it should be noted that Water Code Section 13523 provides that discharge requirements must include, or be in conformance with, reclamation criteria established by the State Department of Health Services. Therefore, we find the coagulation requirement appropriate.

Finally, we note that the Regional Board indicates that the current facility has actually been meeting the more stringent requirements for total non-filterable residue and BOD. We also find these requirements to be appropriate.

Contention No. 2

The Regional Board improperly imposed a restriction on the method of testing for residual chlorine by specifying the "Amperometric Titration Method". Such a test specification is

6. We note that this issue was raised previously in the Matter of the Petition of the Las Virgenes Municipal Water District, et al., Board Order No. WQ 80-19, where we came to a similar conclusion.

inconsistent with Water Code Section 13360. The petition urges that at least two other unspecified, less expensive tests could be used.

Finding: Water Code Section 13360 states that discharge permits shall not specify the manner of compliance. At the outset we must express our doubt as to whether Water Code Section 13360 applies in the case of specifying the type of monitoring. However, we need not reach this issue.

We have previously addressed the issue of whether Water Code Section 13360 precludes a Regional Board from specifying the manner of compliance with waste discharge requirements in NPDES permits. In the Matter of the Petitions of the Las Virgenes Municipal Water District et al., Order No. WQ 80-19, at pp. 20-21, we held that a Regional Board may specify manner of compliance in an NPDES permit:

"...The Porter-Cologne Water Quality Control Act, Division 7 of the Water Code, provides that, notwithstanding any other provision of the division, the State and Regional Boards shall issue NPDES permits as required or authorized by the Clean Water Act, 33 U.S.C. §§1251 et seq., to ensure compliance with the Federal Act. Water Code §13377.

"Under the Clean Water Act, effluent limitations, effluent standards and prohibitions, and standards of performance promulgated by EPA are enforced through the issuance of NPDES permits. Prior to the adoption of such limitations, standards, and prohibitions, the Administrator of EPA is authorized by the Act to impose 'such conditions as the Administrator determines are necessary' to carry out the provisions of the Act. 33 U.S.C. §1342(a)(L); see NRDC, Inc. v. Costle, 568 F.2d 1369 (DC Cir. 1977). In addition, EPA regulations adopted under the Clean Water Act authorize conditions in NPDES permits setting 'best management practices' where numeric effluent limitations are

infeasible or where reasonably necessary to achieve effluent limitations and standards or to carry out the purposes and intent of the Act. 40 C.F.R. §122.62(K). 'Best management practices' are defined to include, for NPDES permits, 'treatment requirements, operating procedures, and practices to control... sludge or waste disposal....' 40 C.F.R. §122.3. (Emphasis added.)

"Consequently, since the Clean Water Act authorizes the imposition of conditions including best management practices, in NPDES permits where limitations and standards have not been promulgated, the Porter-Cologne Act gives the State and Regional Boards the same authority. To the extent that this authorization is inconsistent with the provisions of Water Code Section 13360, the authority of the State and Regional Boards to implement the provisions of the Clean Water Act under Water Code Section 13377 must prevail. See Water Code Sections 13372."

The discharge permit calls for a maximum daily residual chlorine limit of 0.05 mg/l. The discharger is required by federal regulation to utilize test methods for particular effluent constituents which have been approved by EPA (40 CFR 136.3). The Regional Board determined that, of the approved testing procedures to monitor chlorine, only the Amperometric Titration Method appeared to be of sufficient sensitivity to determine whether the 0.05 mg/l chlorine limit was being met. We agree. However, we also find that EPA does have a procedure whereby a discharger may apply for approval of an alternative test procedure. 7/

7. 40 CFR 136.4 provides that:

"(a) Any person may apply to the Regional Administrator in the Region where the discharge occurs for approval of an alternative test procedure.

"(b) When the discharge for which an alternative test procedure is proposed occurs within a State having

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Therefore, we conclude that the Regional Board may properly specify a particular test method since only one approved test provides the necessary accuracy. However, if the discharger can demonstrate that another test of sufficient sensitivity is available and approved, the Regional Board should revise the waste discharge requirements accordingly.

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a permit program approved pursuant to section 402 of the Act, the applicant shall submit his application to the Regional Administrator through the Director of the State Agency having responsibility for issuance of NPDES permits within such State.

"(c) Any application for an alternative test procedure under this paragraph (c) shall:

(1) Provide the name and address of the responsible person or firm making the discharge (if not the applicant) and the applicable ID number of the existing or pending permit, issuing agency, and type of permit for which the alternate test procedure is requested, and the discharge serial number.

(2) Identify the pollutant or parameter for which approval of an alternate testing procedure is being requested.

(3) Provide justification for using testing procedures other than those specified in Table 1.

(4) Provide a detailed description of the proposed alternate test procedure, together with references to published studies of the applicability of the alternate test procedure to the effluents in question.

"(d) An application for approval of an alternate test procedure for nationwide use may be made by letter in triplicate to the Director, Environmental Monitoring and Support Laboratory, Cincinnati, Ohio 45268. Any application for an alternate test procedure under this paragraph (d) shall:

(1) Provide the name and address of the responsible person or firm making the application.

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Contention No. 3

Petitioner contends that the time schedule whereby its project must be completed by December 1, 1982, is unreasonable.

Finding: The record is replete with instances of delays upon delays in implementing the improved treatment process. We feel the time schedule as adopted was tight, but attainable. We find no reason to recommend changing the December 1, 1982, date. However, if the Department can demonstrate that the date is now totally unattainable, the Regional Board could consider a limited extension.

III. CONCLUSIONS AND RECOMMENDATIONS

We conclude that:

1. The more stringent effluent limitations based on the Department of Health Services guidelines are appropriate for a

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(2) Identify the pollutant(s) or parameter(s) for which nationwide approval of an alternate testing procedure is being requested.

(3) Provide a detailed description of the proposed alternate procedure, together with references to published or other studies confirming the general applicability of the alternate test procedure to the pollutant(s) or parameter(s) in waste water discharges from representative and specified industrial or other categories.

(4) Provide comparability data for the performance of the proposed alternate test procedure compared to the performance of the approved procedures."

discharge to a creek where wastewater provides a major portion of the flow and there is a high probability of body contact recreation.

2. The Regional Board under certain conditions may specify a specific test analyzing the discharge of a particular effluent constituent.

3. The time schedule adopted by the Regional Board was appropriate.

IV. ORDER

The waste discharge requirements Order No. 82-07 and Cease and Desist Order No. 82-08 are hereby affirmed.

Dated: October 21, 1982

/s/ Carole A. Onorato
Carole A. Onorato, Chairwoman

/s/ L. L. Mitchell
L. L. Mitchell, Vice Chairman

/s/ Jill D. Golis
Jill D. Golis, Member

/s/ F. K. Aljibury
F. K. Aljibury, Member

/s/ Warren D. Noteware
Warren D. Noteware, Member